



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,804	12/14/2001	Mika Salmivalli	P284103 2980417US/KA/ HER	1649
909	7590	07/23/2004	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			TRUONG, THANHNGA B	
			ART UNIT	PAPER NUMBER
			2135	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,804

Applicant(s)

SALMIVALLI, MIKA

Examiner

Thanhnga Truong

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kortessalmi et al (US 6, 427, 073).

a. Referring to claim 1:

i. Kortessalmi teaches:

(1) creating a database containing records which each contain a mobile equipment identity associated with a mobile station and at least one mobile subscriber identity [i.e., referring to **Figures 6-8, a table 60 for storing the terminal identities (IMEI, columns 62 to 64) allowable to said subscriber identity (IMSI, column 61) is created in connection with the home location register HLR. An existing table, file or data base may alternatively be expanded to include the data of table 60 (column 5, lines 28-35)],**

(2) the mobile station transmitting the mobile equipment identity associated with the mobile station and at least one mobile subscriber identity [i.e., **Figure 7 illustrates subscriber authentication according to the invention. At stage 71 the centre MSC/VLR receives a subscriber identity IMSI and a mobile identity IMEI.sub.MS from a mobile station in connection with location up-dating (column 5, lines 64-67)],**

(3) checking whether there is a record in the database, which contains a mobile equipment identity corresponding to the mobile equipment

identity transmitted by the mobile station, but whose mobile subscriber identity does not correspond to the mobile subscriber identity the mobile station has transmitted, and if yes, producing at least a signal indicating that the mobile equipment identity is possibly a copied one [i.e, referring to Figure 7, At stage 72 an inquiry is sent to the home location register HLR by using the IMSI received. At stage 73 the MSC/VLR receives from the home location register a list of IMEI codes IMEI.sub.HLR corresponding to the IMSI. At stage 74 a check is made to see if IIV is in use, and if not, at stage 75 the MS location updating is accepted. If IIV is in use, a check is made at stage 76 to see if the IMEI.sub.MS sent by the mobile station is included in the IMEI.sub.HLR list sent by the home location register HLR, i.e. if it corresponds to one of the IMEI.sub.HLR identifiers sent by the home location register HLR. If this is the case, the MS location updating is accepted at stage 75. Otherwise the location updating is rejected at stage 77 and the use of the mobile station is prohibited (column 6, lines 8-19). Furthermore, as shown in Figure 8, if IIV is not in use, the MSC/VLR sends to the mobile station an acknowledgement 85 of accepted location updating. A positive acknowledgement 85 is also sent if the IMEI.sub.MS sent by the mobile station corresponds to one of the IMEI.sub.HLR identifiers sent by the home location register HLR. A negative acknowledgement 86 is sent if IIV is in use for said subscriber and the IMEI.sub.MS sent by the mobile station does not correspond to any of the IMEI.sub.HLR identifiers sent by the home location register HLR (column 6, lines 29-37). In the scope of Kortessalmi, the use of a copied SIM card refers to any technique of using fraudulently the SIM card data of another mobile subscriber (column 4, lines 33-35)].

b. Referring to claims 2 and 3:

i. These claims have limitations that is similar to those of claim 1 part (3), thus they are rejected with the same rationale applied against claim 1 part (3) above.

c. Referring to claim 4:

i. Kortessalmi further teaches:

(1) wherein step (3) is performed when the mobile station updates its location [i.e., **Figure 7 illustrates subscriber authentication according to the invention. At stage 71 the centre MSC/VLR receives a subscriber identity IMSI and a mobile identity IMEI.sub.MS from a mobile station in connection with location up-dating (column 5, lines 64-67)]].**

d. Referring to claim 5:

i. Kortesalmi further teaches:

(1) wherein step (3) is performed at predefined intervals [i.e., referring to Figures 7 and 8, “performing at predefined intervals” is considered to be used in the subscriber authentication].

e. Referring to claim 6:

i. Kortesalmi further teaches:

(1) wherein the database is created in the home location register [i.e., two types of data bases are involved in the routing of calls. Subscriber data on all subscribers is stored in a home location register HLR permanently or semi-permanently, including information on the services the subscriber can access and the present location of the subscriber. An other type of register is a visitor location register VLR (column 1, lines 54-58)].

f. Referring to claim 7:

i. This claim has limitations that is similar to those of claim 1, thus it is rejected with the same rationale applied against claim 1 above.

g. Referring to claim 8:

i. This claim has limitations that is similar to those of claim 2, thus it is rejected with the same rationale applied against claim 2 above.

h. Referring to claim 9:

i. Kortesalmi teaches:

(1) an element of a mobile network, which comprises a database, containing records, each record containing an international mobile equipment identity associated with a mobile station and at least one international mobile subscriber identity [i.e., referring to Figures 6-8, the parts of a mobile communication

network, a table 60 for storing the terminal identities (IMEI, columns 62 to 64) allowable to said subscriber identity (IMSI, column 61) is created in connection with the home location register HLR. An existing table, file or data base may alternatively be expanded to include the data of table 60 (column 5, lines 28-35)].

Response to Argument

3. Applicant's arguments filed March 31, 2004 have been fully considered but they are not persuasive.

Applicant argues that:

Kortesalmi fails to teach or disclosed, inter alia, "checking whether there is a record in the database, which contains a mobile equipment identity corresponding to the mobile equipment identity transmitted by the mobile station, but whose mobile subscriber identity does not correspond to the mobile subscriber identity the mobile station has transmitted."

Examiner maintains that:

Kortesalmi discloses all the claimed subject matter and further include: Figure 6 shows a situation wherein two allowable terminals whose identities are IMEI-1a and IMEI-1b, in columns 62 and 63, respectively, have been defined for subscriber identity IMSI-1, that is for "whose mobile subscriber identity does not correspond to the mobile subscriber identity the mobile station has transmitted."

Applicant argues that:

If a given IMSI has no corresponding IMEI entries in the HLR, then Kortesalmi cannot identify whether the mobile equipment is being used illegally. In contrast, the claimed invention can detect such illegal use.

Examiner maintains that:

Referring to Figure 7, at stage 72 an inquiry is sent to the home location register HLR by using the IMSI received. At stage 73 the MSC/VLR receives from the home location register a list of IMEI codes IMEI.sub.HLR corresponding to the IMSI. At stage 74 a check is made to see if IIV is in use, and if not, at stage 75 the MS location updating is accepted. If IIV is in use, a check is made at stage 76 to see if the IMEI.sub.MS sent by the mobile station is included in the IMEI.sub.HLR list sent by the

home location register HLR, i.e. if it corresponds to one of the IMEI.sub.HLR identifiers sent by the home location register HLR. If this is the case, the MS location updating is accepted at stage 75. Otherwise the location updating is rejected at stage 77 and the use of the mobile station is prohibited, that is "detecting such illegal use" (column 6, lines 8-19). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims, e.g., "the claimed invention can detect such illegal use".

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 703-305-0327.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

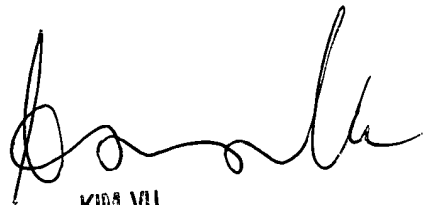
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Application/Control Number: 10/014,804
Art Unit: 2135

Page 7

TBT

July 19, 2004



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2135